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Determinants of Behavior and Proportion of Exclusive Breastfeeding at Tapung Health Center, Kampar Regency

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ABSTRACT

Breast milk is one of efforts to improve the mother and infant's health, one of which is reduce infant mortality rate (IMR). The prevalence of infants that receive the eclusive breastfeeding at The Tapung II public Health Center in 2020 was 57.1%. The purpose of this research is to know the determinant relationship of Exclusive Breastfeeding at The Tapung II Public health center in 2021. Type of this research is quantitative research observational with analytic cross sectional study. The population are Mothers who have babies aged 6-11 months. The sampling is non-probability sampling with consecutive sampling. The analysis used Chi Square and Multiple logistic regression with predictive model. The result of research is the proportion of infant who get exclusive breastfeeding is 43 people (45, grand mother's support and the early initiation of breast feeding) with exclusive breast feeding at The Tapung II Public Health Center. The recommending to health workers are increase the coverage of exclusive breast feeding through a health promotion strategy approach grand mother's support and the early initiation of breast feeding) with exclusive breast feeding at The Tapung II Public Health Center. The recommending to health workers are increase the coverage of exclusive breast feeding through a health promotion strategy approach.

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INTRODUCTION

The quality of Human Resources (HR) is a very important aspect in determining the progress of a country in the current era of globalization. The quality of human resources can be described through economic growth, life expectancy, and the level of education of the community[1],[2]. One of the factors that play a direct role in the quality of a country's human resources is the level of health and nutritional status [3]. Fulfillment of optimal nutrition needs to be considered since the first 1000 days of life (1000 HPK), which starts in the 280-day period in the womb until the child is born and reaches the age of 24 months. The nutritional intake given during this period will determine the quality of human resources in the future [4],[5].

If there is failure to thrive in the 1000 HPK period, the child's physical growth and metabolism of fat, protein, and carbohydrate will be disrupted so that it can trigger the emergence of non-communicable diseases such as diabetes, coronary heart disease, and malnutrition in adulthood. In addition, the fulfillment of nutrition for 1000 HPK that is not optimal will inhibit the development of children's brain cells which are irreversible or cannot be repaired. One of the efforts to achieve the quality of human resources from an early age is with exclusive breastfeeding. Breast milk is a food that can meet all the baby's nutritional needs. Breast milk contains a perfect balance of nutrients for babies compared to formula milk [6]. UNICEF and WHO recommend exclusive breastfeeding for 6 months. breastfed infants 6 months can improve the development of IQ, knowledge, and mental health from toddlers to teens [7]. The World Health Organization (WHO) reports that globally the average rate of exclusive breastfeeding in the world in 2017 was only 38%, WHO targets that by 2025 the rate of exclusive breastfeeding in the first 6 months of birth will increase by at least 50% [8]. According to WHO (2020) the low coverage of exclusive breastfeeding is one of the reasons for the lack of knowledge about lactation management [9].

Based on the Basic Health Research (Riskesdas) taken from 2014-2018 the coverage of exclusive breastfeeding in Indonesia in 2014 was 37.3%, 2015 was 55.7%, in 2016 it was 54%, in 2017 it was 61.33%, and in 2018 experienced a significant decrease of 37.3%. The coverage rate is very low considering the important role of breastfeeding in children's lives. The Ministry of Health targets an increase in the target of exclusive breastfeeding to 80% while according to Indonesia's health profile data, the coverage of infants receiving exclusive breastfeeding in 2018 is only 68.74%[10][11].

According to the Health Profile of Riau Province, the coverage rate for infants who were exclusively breastfed until the age of 6 months in Riau Province in 2018 was 35%. In 2018, Kampar Regency was in third place for the lowest coverage rate for infants who were exclusively breastfed after Kuantan Singingi, Indragiri Hilir and Rokan Hulu. Coverage of babies who are exclusively breastfed in 2018 is 30%. The percentage of babies who were exclusively breastfed in 2017 in Kampar Regency was 8,052 babies (26.5%), in 2018 there were 9,335 babies (28.7%) out of 32,544 babies and in 2019 there were 9,792infants (60.1%) of the total 16,296 babies(Kampar Health Office, 2019). Data on the coverage of babies who received exclusive breastfeeding at the Tapung II Health Center in 2017 were 385 babies (19.2%), in 2018 there were 712 babies (44.5%), in 2019 there were 784 babies (82.4%) and in 2019 there were 784 babies (82.4%). 2020 by 57.1%. This coverage has decreased significantly compared to the previous year. The decrease in exclusive breastfeeding coverage at the Tapung II Health Center was due to some mothers working as traders, the influence of mother-in-law or biological mother's support that influenced mothers in breastfeeding and the existence of cultural factors in feeding breastfeeding mothers who were still trusted by some people at Tapung II Health Center. Exclusive breastfeeding is very important for the health of mothers and babies. However, exclusive breastfeeding at the Tapung II Health Center has not yet reached the target. Based on the above background, the authors are interested in conducting research.

RESEARCH METHOD

This research is an observational quantitative analytic study with a cross sectional study design. The research was conducted in the working area of Tapung II Health Center, Kampar Regency. The time of the study was carried out in June-September 2021. The population in this study was mothers who had babies aged 6 months 1 day-11 months. Samples were taken from the population that met the inclusion criteria, namely the age of infants 6 months-1 days at the Tapung II Health Center, able to communicate and have a good memory. The number of samples was 95 people. The sampling technique used is non-probability sampling with consecutive sampling technique taken based on respondents who came and met the inclusion criteria and then included in the study until the required number of respondents was met. The dependent variable in this study was exclusive breastfeeding, while the independent variables were feeding traditions, dietary taboos/ taboos,

grandmother's support, promotion of formula milk and early initiation of breastfeeding. The analysis carried out was univariate, bivariate with chi square and multivariate analysis, namely multiple logistic regression analysis with predictive models.

RESEARCH RESULTS

The results of this study are the proportion of infants who received exclusive breastfeeding 43 people (45.3%) and infants who did not receive exclusive breastfeeding 52 people (54.7%). The proportion of babies who are exclusively breastfed can be shown in the following table.

Table 1. Proportion of Exclusive Breastfeeding

Exclusive Breastfeeding	Amount	
	N	%
Non Exclusive	52	54.7
Exclusive	43	45.3
Amount	95	100

The characteristics of the subjects include the age of the baby, while the characteristics of the respondents in this study include: mother's occupation and ethnicity.

Table 2. Distribution of Research Subjects

Subject Characteristics	mean	median	Mode	Minimum	Maximum
Baby Age	8.8	9	8	6	11

Table 3. Distribution of Respondents Characteristics

Characteristics of Respondents	n	%
Occupation		
a. Housewife	76	80.0
b. Private	7	7.4
c. Trader	12	12.6
Tribes		
a. Javanese	44	46.3
b. Malay	18	18.9
c. Minang	25	26.3
d. Batak	8	8.4

Table 4. Frequency Distribution of Behavioral Determinants with Exclusive Breastfeeding

Variables and Categories	n	%
Feeding tradition		
Support	31	32.6 67.4
Does not support	64	
SupportGrandma		
Not enough	27	28.4 71.6
Well	68	
Food taboos/ taboos		
There is	28	29.5 70.5
There isn't any	67	
Formula milk promotion		
Once	32	33.7 66.3
Never	63	
Early Initiation of Breastfeeding (IMD)		
No IMD		

IMD	33	34.7	65.3
	62		

Based on the results of the analysis in table 3, it is found that the tradition of feeding supports as much as 32.6%, the lack of support from grandmothers is 28.4%, there are taboos / taboos on food as much as 29.5%, mothers who have received formula milk promotions are 33.7%, mothers who did not do Early Initiation of Breastfeeding (IMD) were 34.7%.

Table 5. The Relationship between Behavioral Determinants and Exclusive Breastfeeding

Variable	Exclusive Breastfeeding						P Value	por (95% CI)
	Non Exclusive		Exclusive		Total			
	n	%	n	%	n	(%)		
Feeding tradition								
Support	25	80.6						
Does not support	27	42.2	6	19.4	31	100	0.001	5,710 (2,059 – 15,832)
			37	57.8	64	100		
Total	52	54.7	43	45.3	95	100		
Grandma's Support								
Not enough	21	77.8	6	22.2	27	100	0.009	4,177 (1,499 – 11,644)
Well	31	45.6	37	54.4	68	100		
Total	52	54.7	43	45.3	95	100		
Food taboos/ taboos								
There is	20	71.4	8	28.6	28	100		
There isn't any	32	47.8	35	52.2	67	100	0.059	2,734 (1,058 – 7,069)
Total	52	54.7	43	45.3	95	100		
Formula milk promotion								1,971 (0.817 – 4,756)
Once		65.6	11	34.4	32	100	0.193	
Never	21	49.2	32	50.8	63	100		
	31							
Total	52	54.7	43	45.3	95	100		
Early Initiation of								
Breastfeeding (IMD)	26	78.8	7	21.2	33	100		5,143 (1,939 – 13,637)
No IMD	26	41.9	36	58.1	62	100	0.001	
IMD								
Total	52	54.7	43	45.3	95	100		

The results of the study showthere is a relationship between the determinantfeeding tradition variables (POR:5,710 95%CI=2,059-15,832), grandmother's support (POR:4,177 95% CI=1,499-11,644), dietary taboos (POR:2,734) 95% CI=1,058-7.069), promotion of formula milk (POR: 1,971 95%CI=0.817-4,756) and Early Initiation of Breastfeeding (POR:5,143 95%CI=1,939-13,637) with exclusive breastfeeding at Tapung II Health Center

Table 6.Multivariate Analysis (Last Modeling) Behavioral Determinants Associated with Exclusive Breastfeeding

VARIABLE	P value	OR	(95%CI)	
			Lower	Upper
Feeding Traditions	**0.00**	**4,923**	**1,625**	**14.916**
Grandma's Support	**0.013**	4.251	**1,353**	**13,355**
Early Initiation of Breastfeeding (IMD)	**0.003**	4,963	**1,702**	**14,470**
Omnibus Test = 0.000 Negelkerke R Square = 0.355				

The results of multivariate analysis showed that the most dominant variable associated with exclusive breastfeeding was Early Initiation of Breastfeeding.

Discussion

Nutritional factors play a very important role in improving health status so that it can improve the quality of human resources, namely healthy, intelligent and productive humans. However, in its implementation in the community, there are still obstacles/factors related to exclusive breastfeeding, including feeding traditions, grandmother's support, and early initiation of breastfeeding. The results of statistical tests using chi square obtained a significant relationship between the tradition of feeding with exclusive breastfeeding. The results of the calculation of the prevalence odds ratio show that mothers who are supported by traditional feeding are 5.7 times more likely to not give exclusive breastfeeding than mothers who are not supported by traditional feeding. The results of statistical tests using chi square obtained a significant relationship between grandmother's support and exclusive breastfeeding. The results of the calculation of the prevalence odds ratio (POR) show that mothers who have less support from their grandmothers are 4.1 times more likely to not give exclusive breastfeeding than mothers who have good support from their grandmothers. In exclusive breastfeeding, grandmother's support is very important. Grandmother's support can provide motivation and encouragement for mothers to breastfeed their babies. Grandmothers can also be influential in decision-making in the family because they are considered experienced people both in terms of baby care and breastfeeding. 1 time for not giving exclusive breastfeeding compared to mothers who received good support from grandmother. In exclusive breastfeeding, grandmother's support is very important. Grandmother's support can provide motivation and encouragement for mothers to breastfeed their babies. Grandmothers can also be influential in decision-making in the family because they are considered experienced people both in terms of baby care and breastfeeding. 1 time for not giving exclusive breastfeeding compared to mothers who received good support from grandmother.

In exclusive breastfeeding, grandmother's support is very important. Grandmother's support can provide motivation and encouragement for mothers to breastfeed their babies. Grandmothers can also be influential in decision-making in the family because they are considered experienced people both in terms of baby care and breastfeeding.The strategy to motivate the practice of exclusive breastfeeding is to increase the involvement of husbands and other family members[12]. Husbands and families can play an active role in breastfeeding by providing emotional support or other practical assistance [13]. The support provided by the husband will affect the psychological condition of the mother which will have an impact on the success of breastfeeding. About 80% to 90% of breast milk production is determined by the mother's emotional state related to the mother's oxytocin reflex in the form of thoughts, feelings and sensations. The results of statistical tests using chi square obtained a significant relationship between Early Initiation of Breastfeeding (IMD) and exclusive breastfeeding. The results of the calculation of the prevalence odds ratio show that mothers who do not do Early Initiation of Breastfeeding (IMD) are 5.1 times more at risk of not giving exclusive breastfeeding than mothers who do Early Initiation of Breastfeeding (IMD). the results of the analysis obtained p = 0, 007 which means that there is a relationship between IMD and exclusive breastfeeding [14].

IMD will influence a mother to give further breast milk including exclusive breastfeeding for up to 6 months and breast milk with additional food for up to 2 years. Factors that are not related to exclusive breastfeeding are the promotion of formula milk and food taboos/ taboos. The results of statistical tests using chi square did not find a significant relationship between the promotion of formula milk and exclusive breastfeeding. This is probably due to the fact that most of the people in the study area are middle to lower economic status, although some of them have received promotions for formula milk, but they cannot afford it. This study is not in line with research with chi square test on the variable of promotion of formula milk with exclusive breastfeeding obtained p value = 0.032 [15].

This indicates that there is a relationship between the promotion of formula milk and exclusive breastfeeding. The results of the previous study in Kampar district showed that there was a

significant relationship between promotion of formula milk and exclusive breastfeeding with p value = 0.00 [16]. The results of statistical tests using chi square did not show a significant relationship between dietary taboos and exclusive breastfeeding. The results of the previous study in Kampar district showed that there was a significant relationship between promotion of formula milk and exclusive breastfeeding with p value = 0.00 [16].

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CONCLUSION

Factors related to exclusive breastfeeding are feeding traditions, grandmother's support and early initiation of breastfeeding (IMD). Factors that are not related to exclusive breastfeeding are the promotion of formula milk and food taboos/ taboos. The most dominant factor associated with exclusive breastfeeding is early initiation of breastfeeding (IMD). Mothers who do not initiate early breastfeeding are more at risk of not giving exclusive breastfeeding than mothers who do early initiation of breastfeeding (IMD). The proportions of each independent variable are 32.6% supportive feeding tradition, 28.4% lack of grandmother support, 29.5% dietary taboos/ taboos, 33.7% mothers who have received formula milk promotion, Mothers who did not do Early Breastfeeding Initiation (IMD) were 36.8%.

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